

**CLAIMS:**

1       1. A blank for forming a building element, the  
2       blank comprising:

3               an elongate body portion (10) having first and  
4       second ends and a plurality of transverse fold lines  
5       (22) which divide the body portion (10) into a  
6       plurality of panels (14,16,18,20), the panels  
7       (14,16,18,20) each having first and second  
8       longitudinal edges;

9               one or more first tab members (44) extending  
10      from the first end of the body portion (10); and

11               one or more first apertures (42) adjacent the  
12      second end of the body portion (10);

13               wherein each of said plurality of panels  
14       (14,16,18,20) has at least one second tab (34)  
15       extending from said first longitudinal edge and a  
16       side flange portion (24) adjacent said second  
17       longitudinal edge, and wherein each side flange  
18       portion (24) is provided with at least one second  
19       aperture (32).

20

21       2. The blank of Claim 1, wherein each side flange  
22       portion (24) is divided from its respective panel  
23       (14,16,18,20) by a longitudinally extending fold  
24       line (23) which extends along the length of the body  
25       portion (10), and wherein the side flange portions  
26       (23) are adapted to be folded substantially  
27       perpendicular to their respective panels  
28       (14,16,18,20).

29

1       3. The blank of either preceding claim, wherein  
2 the body portion (10) has an end flange portion (38)  
3 adjacent the second end thereof, the at least one  
4 first aperture (42) being formed in the end flange  
5 portion (38).

6

7       4. The blank of any preceding claim, wherein the  
8 end flange portion (38) is divided from the body  
9 portion by one of the plurality of transverse fold  
10 lines (40), and wherein the end flange portion (38)  
11 is adapted to be folded substantially perpendicular  
12 to the body portion (10).

13

14       5. The blank of any preceding claim, wherein one  
15 or more of the panels (14,16,18,20) includes a  
16 strengthening formation thereon.

17

18       6. The blank of any preceding claim, wherein one  
19 or more of the panels (14,16,18,20) is provided with  
20 a third aperture adapted to receive a reinforcing  
21 means.

22

23       7. The blank of any preceding claim, wherein the  
24 building element is a building block (12).

25

26       8. The blank of any preceding claim, the blank  
27 being formed from sheet metal.

28

29       9. The blank of any of Claims 1 to 7, the blank  
30 being formed from sheet plastics.

31

1 10. A building block (12) formed from the blank  
2 according to any of Claims 1 to 9.

3

4 11. A building element comprising:

5 a body portion (101,201,401) having first and  
6 second ends and comprising a plurality of integrally  
7 formed panels adapted to define the perimeter of the  
8 building element, wherein each panel has first and  
9 second longitudinal edges;

10 at least one first connecting member  
11 (104,204,304,402) adapted to be attached to the  
12 panels adjacent their first longitudinal edges;

13 at least one second connecting member  
14 (102,202,302,402) adapted to be attached to the  
15 panels adjacent their second longitudinal edges; and

16 a third connecting member (106,206,306,406)  
17 adapted to be attached to the body portion  
18 (101,201,401) adjacent the first end thereof;

19 wherein the first and second connecting members  
20 are provided with first and second attachment means,  
21 respectively, each of the attachment means being  
22 adapted to attach the building element to an  
23 adjacent building element, and wherein the third  
24 connecting member (106,206,306,406) is adapted so as  
25 to engage the second end of the body portion  
26 (101,201,401).

27

28 12. The building element of Claim 11, further  
29 comprising a fourth connecting member  
30 (108,208,308,408) adapted to be attached to the body  
31 portion (101,201,401) adjacent the second end

1 thereof, wherein the third and fourth connecting  
2 members are adapted so as to be mutually engagable.  
3

4 13. The building element of Claim 12, wherein the  
5 third and fourth connecting members are each  
6 provided with a resilient engagement member adapted  
7 to engage with one another.  
8

9 14. The building element of Claim 12, wherein the  
10 third connecting member (106) includes one or more  
11 apertures (142) therein, and the fourth connecting  
12 member (108) includes one or more tabs (144)  
13 projecting therefrom for engagement with the  
14 apertures (142) in the third connecting member  
15 (106).  
16

17 15. The building element of any of Claims 11 to 14,  
18 wherein the first and second connecting members are  
19 each formed from a single piece of material and each  
20 is adapted to follow the perimeter of the building  
21 element.  
22

23 16. The building element of any of Claims 11 to 14,  
24 wherein the building element comprises a plurality  
25 of first and second connecting members attached to  
26 each longitudinal edge of each panel.  
27

28 17. The building element of any of Claims 11 to 16,  
29 wherein each of the connecting members is attached  
30 to the body portion (101,201,401) using an  
31 attachment method selected from the group comprising  
32 riveting, gluing and crimping.

1

2       18. The building element of any of Claims 11 to 16,  
3       wherein each of the connecting members (402) is  
4       provided with a plurality of engagement teeth (422)  
5       and each panel (420) includes a plurality of cells  
6       (403), the teeth (422) being adapted to be inserted  
7       in the cells (403).

8

9       19. The building element of Claim 18, wherein each  
10      engagement tooth (422) has a first engagement  
11      portion (422a) projecting in a first direction and a  
12      second engagement portion (422b) projecting in a  
13      second, substantially opposite, direction.

14

15      20. The building element of any of Claims 11 to 19,  
16      wherein each of the second connecting members  
17      (202, 302, 402) includes a strengthening rib  
18      (240, 340, 440) projecting therefrom.

19

20      21. The building element of any of Claims 11 to 20,  
21      wherein each of the first connecting members (402)  
22      includes a strengthening rib (440) projecting  
23      therefrom.

24

25      22. The building element of any of Claims 11 to 21,  
26      wherein the first attachment means comprises at  
27      least one tab (134) projecting from the first  
28      connecting member (104), and the second attachment  
29      means comprises at least one aperture (132) adapted  
30      to receive the at least one tab (134) of an adjacent  
31      building element.

32

1       23. The building element of any of Claims 11 to 21,  
2       wherein the first attachment means comprises a first  
3       fastener element (232) and a detachable fastener  
4       member (234) adapted to attach to the first fastener  
5       element (232), and the second attachment means  
6       comprises a second fastener element (232) adapted to  
7       receive a fastener member (234) of an adjacent  
8       building element.

9

10      24. The building element of any of Claims 11 to 21,  
11      wherein the first attachment means comprises a  
12      detent (305) projecting from the first connecting  
13      member (304), and the second attachment means  
14      comprises a resilient catch (342) adapted to engage  
15      with the detent (305) of an adjacent building  
16      element.

17

18      25. The building element of any of Claims 11 to 24,  
19      wherein the body portion (101,201,401) is formed  
20      from a single sheet of extruded cellular plastics  
21      material having a plurality of cells (403) therein.

22

23      26. The building element of any of Claims 11 to 25,  
24      wherein each connecting member (102,104,106,108) is  
25      formed from sheet metal.

26

27      27. The building element of any of Claims 11 to 25,  
28      wherein the connecting members are formed from a  
29      plastics material.

30

1       28. The building element of any of Claims 11 to 25,  
2       wherein at least one of the connecting members is  
3       integrally formed with the body portion.

4

5       29. A blank for forming a building element, the  
6       blank comprising:

7                an elongate body portion (58,88) having first  
8       and second ends and a plurality of first apertures  
9       (76,77,89) formed therein; and

10               first and second side portions (64,66,94,96)  
11       integrally formed with the body portion (58,88),  
12       each side portion (64,66,94,96) being divided from  
13       the body portion (58,88) along a first  
14       longitudinally extending fold line (68,98);

15               wherein each side portion (64,66,94,96) has at  
16       least one second longitudinal fold line  
17       (78,91,93,95,97) which divides the side portion  
18       (64,66,94,96) into at least two sections, and  
19       wherein at least one side portion (64,66,94) has a  
20       plurality of tabs (80,99) extending laterally  
21       therefrom.

22

23       30. The blank of Claim 29, further comprising first  
24       and second end flanges (72,87) adjacent the first  
25       and second ends of the body portion (58,88), each  
26       end flange (72,87) divided from the body portion  
27       (58,88) along a transverse fold line (70,85).

28

29       31. The blank of either Claim 29 or Claim 30,  
30       wherein the plurality of first apertures (76,77) are  
31       formed in two substantially parallel lines extending  
32       longitudinally along the body portion (58).

1

2       32. The blank of any of Claims 29 to 31, wherein  
3       each of the first and second side portions (64,66)  
4       has a plurality of tabs (80) extending laterally  
5       therefrom.

6

7       33. The blank of any of Claims 29 to 32, wherein  
8       the building element is a door lintel.

9

10      34. The blank of either Claim 29 or Claim 30,  
11       wherein the plurality of first apertures (89) are  
12       formed substantially in a single line extending  
13       longitudinally along the body portion (88).

14

15      35. The blank of Claim 32, wherein the building  
16       element is a window sill.

17

18      36. The blank of any of Claims 29 to 35, wherein  
19       the blank (58,84) is formed from sheet metal.

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21      37. The blank of any of Claims 29 to 35, wherein  
22       the blank (58,84) is formed from a plastics  
23       material.